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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,302	10/22/2003	Douglas M. Dillon	PD-N94026K	2255

20991 7590 12/21/2006

THE DIRECTV GROUP INC
PATENT DOCKET ADMINISTRATION RE/R11/A109
P O BOX 956
EL SEGUNDO, CA 90245-0956

EXAMINER	
AVELLINO, JOSEPH E	
ART UNIT	**PAPER NUMBER**
2143	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/21/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/691,302	DILLON, DOUGLAS M.	
	Examiner	Art Unit	
	Joseph E. Avellino	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *53-61* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *53-61* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 53-61 are presented for examination; claims 53, 55, and 59 independent. The Office acknowledges the cancellation of claims 20-24, 29-32, and 42-52.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 53-58 are rejected under 35 U.S.C. 101 because they are not tangible.

3. Exemplary claim 53, recites a plurality of software elements (i.e. a protocol stack). Although it is claimed in an apparatus, the result is merely software, per se, which is intangible. See MPEP 2106 regarding computer-related inventions. Furthermore the claimed "hardware interface" can be construed as software.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ioannidis et al. ("IP-based Protocols for Mobile Internetworking" IEEE; 1991) (hereinafter Ioannidis).

5. Referring to claim 53, Ioannidis discloses an apparatus comprising:

a protocol stack comprising an application layer (i.e. where the applications are actually executed; "protocols above the network layer"), a network layer (IP layer), and a physical layer (i.e. the actual network) (Figure 1; p. 235; section 1; p. 239, section 2.5);

wherein said physical layer comprises a hardware interface between said apparatus and a network (i.e. connection between the MSS and the network n0) (Figure 1);

wherein network-level tunneling of a packet from said network layer, the tunneling creating a packet having a plurality of network layer source addresses and a plurality of network layer destination addresses, takes place in said apparatus below said network layer but above said physical layer (i.e. IP-within-IP encapsulation is done on *the output routine of the IP layer*, indicating that it is done after the packet has been IP formatted) (pp. 239-240; section 2.5).

Ioannidis does not specficially entail that the MSS and the mobile host can be construed as one "apparatus", however it has been held obvious to integrate parts together. See In re Larson 144 USPQ 347 (CCPA 1965). By this rationale, It would have been obvious to one of ordinary skill in the art to modify the teaching of Ioannidis to combine a mobile host with a mobile support station in order to take advantage of the higher bandwidth normally associated with a wired connection (which can be provided by a MSS) than an over-the-air connection, which generally has a lower bandwidth, thereby resulting in a faster connection.

6. Claims 54-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ioannidis in view of Attanasio (USPN 5,371,852) (cited by Examiner in previous Office Actions).

Referring to claim 54, Ioannidis discloses the invention substantively as described in claim 53. Ioannidis does not specifically disclose stripping an Ethernet header from a packet received from an IP layer. In analogous art, Attanasio discloses another driver for use in a computing device to send an IP packet through an IP tunnel across a network which discloses the driver removes the Ethernet header and Ethernet checksum from the Ethernet packet (col. 11, lines 55-60). It would have been obvious to one of ordinary skill in the art to combine the teaching of Ioannidis with Attanasio since Ioannidis discloses the use of IP packets, but does not specifically discuss as to how they originate or how they are formed. This would lead one of ordinary skill in the art to search for art as to how these IP packets are formed, eventually finding the system described in Attanasio and its novel method describing how frame headers are stripped to be processed (col. 11. lines 55-60).

Ioannidis in view of Attanasio do not *explicitly* state that the driver and the protocol stack are in the same device, however it has been held obvious to make parts integral. See In re Larson 144 USPQ 347 (CCPA 1965). By this rationale, one of ordinary skill in the art would find it obvious, even *if* the driver and the TCP/IP stack happen to be on different devices, one would consider the ability of putting both of these

entities on the same device since both the driver and a TCP/IP stack are both software programs, which can be moved from one device to another.

7. Claims 56-61 are rejected for similar reasons as stated above. Furthermore it is well known that the use of HTTP applications are well known and expected in the art.

Response to Arguments

8. Applicant's arguments with respect to claims 53-61 have been considered but are not persuasive.

9. In the remarks, Applicant argues, in substance, that (1) Ioannidis does not disclose that the encapsulation is done below said network layer.

10. As to point (1) the Office construes, that since the encapsulation is done on the output routine of the IP layer, it is construed as below the network layer, since the network layer would construct the IP packet, it would then be sent to the output layer, which would then modify he packet to produce the IPIP encapsulation. Furthermore, even if the "output routine" of the IP layer cannot be construed as "below the network layer", one of ordinary skill in the art would find it obvious since it has been held obvious to make separable. See Nerwin v. Erlichman 168 USPQ 177 (1969). By this rationale, the rejection is maintained.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph E. Avellino, Examiner
December 7, 2006